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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,714	12/02/2003	Frank Hundscheidt	P16614-US1	4732

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ERICSSON INC.
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EXAMINER	
LIU, LIN	
ART UNIT	PAPER NUMBER
2109	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/725,714	HUNDSCHEIDT ET AL.	
	Examiner	Art Unit	
	Lin Liu	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8,9 and 11-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 8-9 and 11-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/02/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to communications filed on 12/02/2003. Claims 1-4, 8-9 and 11-15 are pending and have been examined.

2. Preliminary amendment submitted on December 2, 2003 is considered.

Priority

3. Applicant's claim to foreign priority to EPO 02293038.2 with the filing date of 12/09/2002 has been recognized.

Specification

4. The abstract of the disclosure is objected to because it is broken into two paragraphs. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims **1- 4, 8-9, and 11-14** are rejected under 35 U.S.C 102 (e) as being anticipated by **Ishiguro (Publication no.: US 2003/0185397 A1).**

Consider **claims 1 and 11,** Ishiguro teaches a method and a system for determining locations of service instances for optimising distribution of a service in a network, from a

source to a plurality of clients each having predetermined requirements, wherein said network can be modelled by means of a graph, said method comprises steps of:

placing (page 7, paragraph 143, noted that each node on the tree is assigned with a licensing key in servicing for the encryption and decryption) a service instance in each leaf in said graph (fig. 12, and page 7, paragraph 142, noted the hierarchical tree structure is made up with the leaves); and starting from the leaves, for each service instance (page 8, paragraph 145, noted that the key granting the use of any service starts from the leaf at the bottom level to the root node at the topmost level):

checking (page 7, paragraph 129, noted that the client needs to provide leaf ID and password to the server in order to check whether the client has paid for the servicing fee) whether the service instance when placed in a vertex (page 7, paragraph 143, noted that this checking is done in the node with the key provided) on the next higher level can fulfil the requirements (page 8, paragraph 148, noted that after successively decrypting the node keys, the process is carried to next higher level node) of all clients to be served by said service instance; and

moving said service instance one level higher, depending on the result of the checking step (page 8, paragraph 148, noted that after successively decrypting the node keys, the process is moved to next higher level node).

Consider **claims 2 and 12,** Ishiguro teaches a method and a system according to claim 1, further comprises the steps of determining that at least two service instances (fig. 12, leaves 0, 1, 2 and 3) meet in said vertex (page 9, paragraph 155, noted that these leaves share the same vertex node K00) and combining said service instances

into one service instance (page 9, paragraph 155, noted that this shared node key is established as a content key in servicing for data encryption and decryption).

Consider **claims 3 and 13,** Ishiguro teaches a method and a system according to claim 1 further comprises a step, prior to said placing step, of determining levels in said graph (page 10, paragraph 170, noted that the data has a tag part which indicates the positions of the encrypted node keys and leaf keys).

Consider **claims 4 and 14,** Ishiguro teaches a method and a system according to claim 1, wherein said checking step comprises a table-based analysis step (fig. 15A, and page 9, paragraphs 157 and 159, noted that a table-based analysis is performed for the encryption keys).

Consider **claim 8,** Ishiguro teaches a device for determining locations of service instances for optimising distribution of a service in a network, from a source to a plurality of clients each having predetermined requirements, wherein said network can be modelled by means of a graph, comprising:

lodging means (page 7, paragraph 143, noted that each node on the tree is assigned with a licensing key in servicing for the encryption and decryption), for hosting a service instance;

checking means, for checking (page 7, paragraph 129, noted that the client needs to provide leaf ID and password to the server in order to check whether the client has paid for the servicing fee) whether the service instance when placed in a vertex on the next higher level can fulfil the requirements (page 8, paragraph 148, noted that after

successively decrypting the node keys, the process is carried to next higher level node) of all clients to be served by said service instance;

processing means (fig. 2 CPU 21), for coordinating said lodging means and said checking means and for controlling said vertex (page 4, paragraph 79 and 87, noted that CPU carries out various of processes. Including the communication responses between the clients and the servers); and

input/output means (fig. 2, I/O interface 32), for sending and receiving messages and service instances (page 4, paragraphs 83, 84 and 87, noted that I/O interface handles the response from the user and transmits the encrypted content data to the storage).

Consider **claim 9,** Ishiguro teaches a device according to claim 8, further comprises combining means, for determining that at least two service instances (fig. 12, leaves 0, 1, 2 and 3) meet in said vertex (page 9, paragraph 155, noted that these leaves share the same node K00) and for combining said service instances into one service instance (page 9, paragraph 155, noted that this shared node key is established as a content key in servicing for data encryption and decryption).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims **5 and 15 are** rejected under 35 U.S.C. 103(a) as being unpatentable over **Ishiguro (Publication no.: US 2003/0185397 A1)** in view of **Moody (publication no.: US 2005/0005272)**

With respect to **claims 5 and 15,** Ishiguro teaches all the claimed limitations except that he does not explicitly teach a method and a system according to claim 1 and 11, wherein said checking step comprises a Petri net analysis step.

In an analogous art, Moody teaches the a checking step comprises a Petri net analysis step (page 3, paragraphs 47 and 48, noted that Petri nets technique is used in analyzing the system).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the analysis technique of Petri nets as taught by Moody in Ishiguro's method in order to provide a (powerful and efficient system model that incorporate the synchronization, conflict, and concurrency issues associated with the distributed, dynamic resource allocation problem of autonomous negotiating systems, page 3, paragraph 48).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bellinger discloses a broadband network service delivery method and device in publication no.: US 2002/0169858. Koyama discloses a decentralized control system for network connection in publication no.: US 2004/0230980. Stork discloses a document controlled workflow systems and methods in publication no.: US 2003/0055811.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Liu whose telephone number is (571) 270-1447. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

L.Liu
02/02/2007

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER